

Issues in the development of dairy value chains in rural India

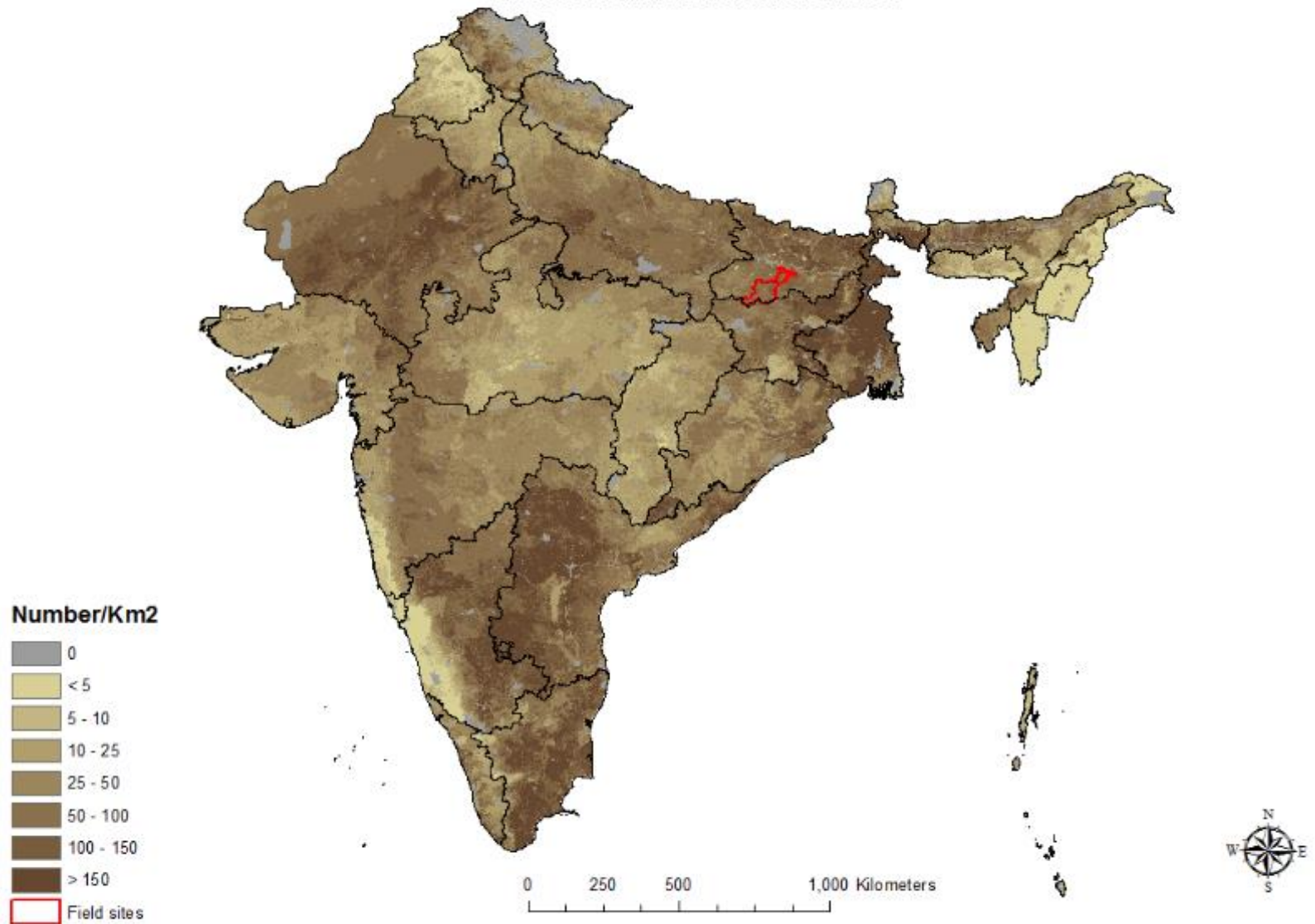
T.S. Vamsidhar Reddy, Isabelle Baltenweck, Rekha Kumari, A.K. Jha, Nils Teufel

International Conference of Agricultural Economists (ICAE)
Milan, Italy, 9-14 August 2015

Background

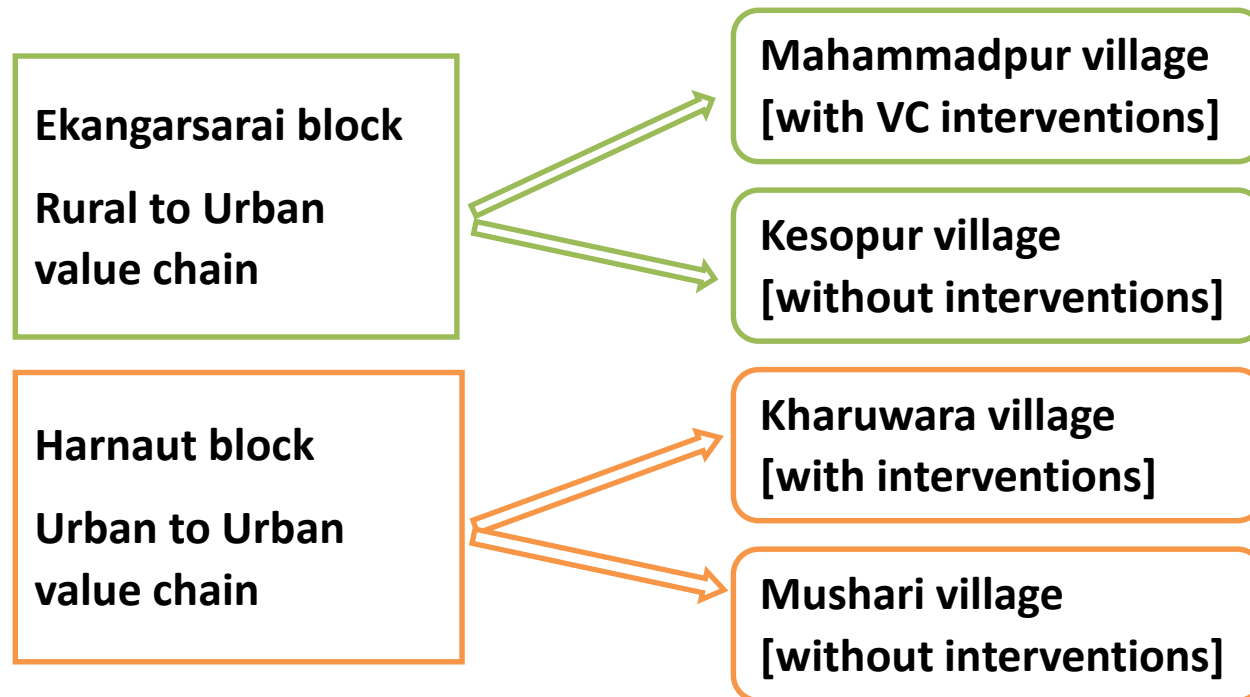
- Livestock and Fish CRP's Dairy Value Chain Transformation in Bihar
- Value Chain Assessments as first characterisation step towards collecting insights and evidence for successful value chain interventions.
- 4 selected locations in Nalanda district
- Assessment objectives:
 - Characterize the dairy production systems and value chain in a particular site
 - Determine constraints, barriers to participation by poor men and women
 - Identify opportunities for value chain upgrading and expansion, considering associated risks with particular regard to feeds, breeding, animal health and food safety
 - Develop solutions and opportunities for improvement

Livestock and Fish India field sites



Selection of sites

- Locations selected to represent different conditions



The Approach

- Applied to all 6 value chain projects
- Information collected from
 - Producers, by group discussions (FGD) and
 - other value chain actors, randomly selected, by individual interviews (KII).

Value Chain Actors	Participants	FGD	KII
Farmer	299	4	--
Livestock feed provider	5	--	5
Health and breeding service provider	5	--	5
Milk traders/village level collectors	6	--	6
Processors/Retailer	9	--	9
Milk Societies	2	--	2
Consumer	12	--	12

The Tool for Value Chain Assessments

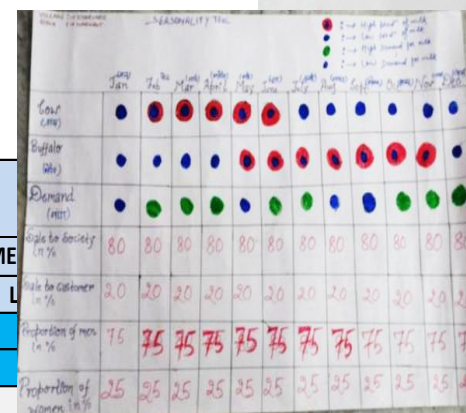
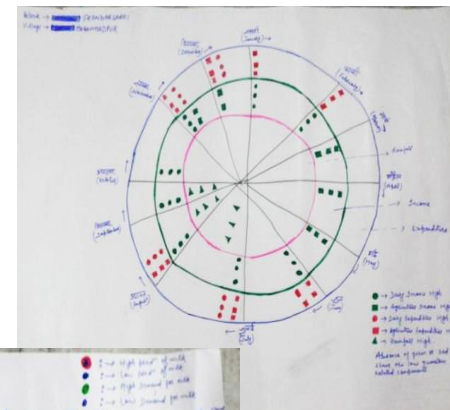
Producers: standardized combination of group discussion exercises

Tool	Duration (hr)	Type of group
Introduction	0.5	Plenary
A-Livelihoods analysis	0.5	Genders separated
B-Seasonal calendar	1	Genders separated
C-Gender roles (activity clock)	1	Genders separated
D-Decision making	0.5	Genders separated
E-Group membership / collective action	0.5	Mixed gender
F-Objectives and systems for dairy production	1	Genders separated
G-Value chain mapping	2	Genders separated
H-Feeds and feeding	1	Mixed gender
I-Breeding / Seed input	1	Mixed gender
J-Constraints and solutions	1	Plenary
Closing	0.25	Plenary

Other VC actors : standardized key informant interviews

Seasonal Calendars

- Seasonal calendars provide information about rainfall, and income & expenditure patterns



Name of month	Income				Expenditure		
	Agriculture Income	Livestock Income	Labor Wages		Agriculture Expenditure	Livestock Expenditure	Personal Expenditure
Jan	Orange	Purple	Orange	Green	Purple	Purple	Purple
Feb	Yellow	Purple	Orange	Green	Yellow	Purple	Purple
March	Orange	Yellow	Orange	Green	Yellow	Yellow	Purple
Apr	Orange	Yellow	Orange	Green	Yellow	Yellow	Purple
May	Orange	Yellow	Purple	Green	Yellow	Yellow	Purple
June	Yellow	Purple	Purple	Green	Purple	Purple	Purple
July	Yellow	Purple	Purple	Green	Purple	Purple	Purple
Aug	Yellow	Purple	Purple	Green	Purple	Purple	Yellow
Sept	Yellow	Purple	Purple	Green	Purple	Yellow	Purple
Oct	Orange	Orange	Purple	Green	Purple	Yellow	Purple
Nov	Purple	Purple	Purple	Green	Purple	Purple	Purple
Dec	Purple	Purple	Purple	Green	Yellow	Purple	Purple

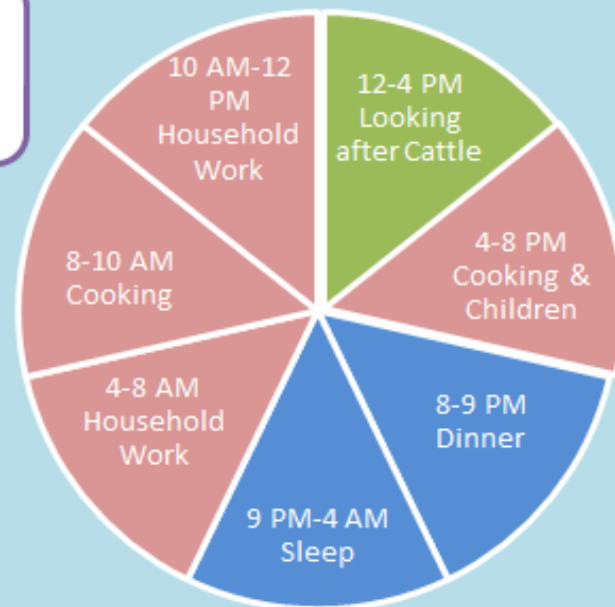
Gender Activity Clocks

Gender activity clocks illustrate gender roles in different villages

Mushari Village
Male Activity
Cycle

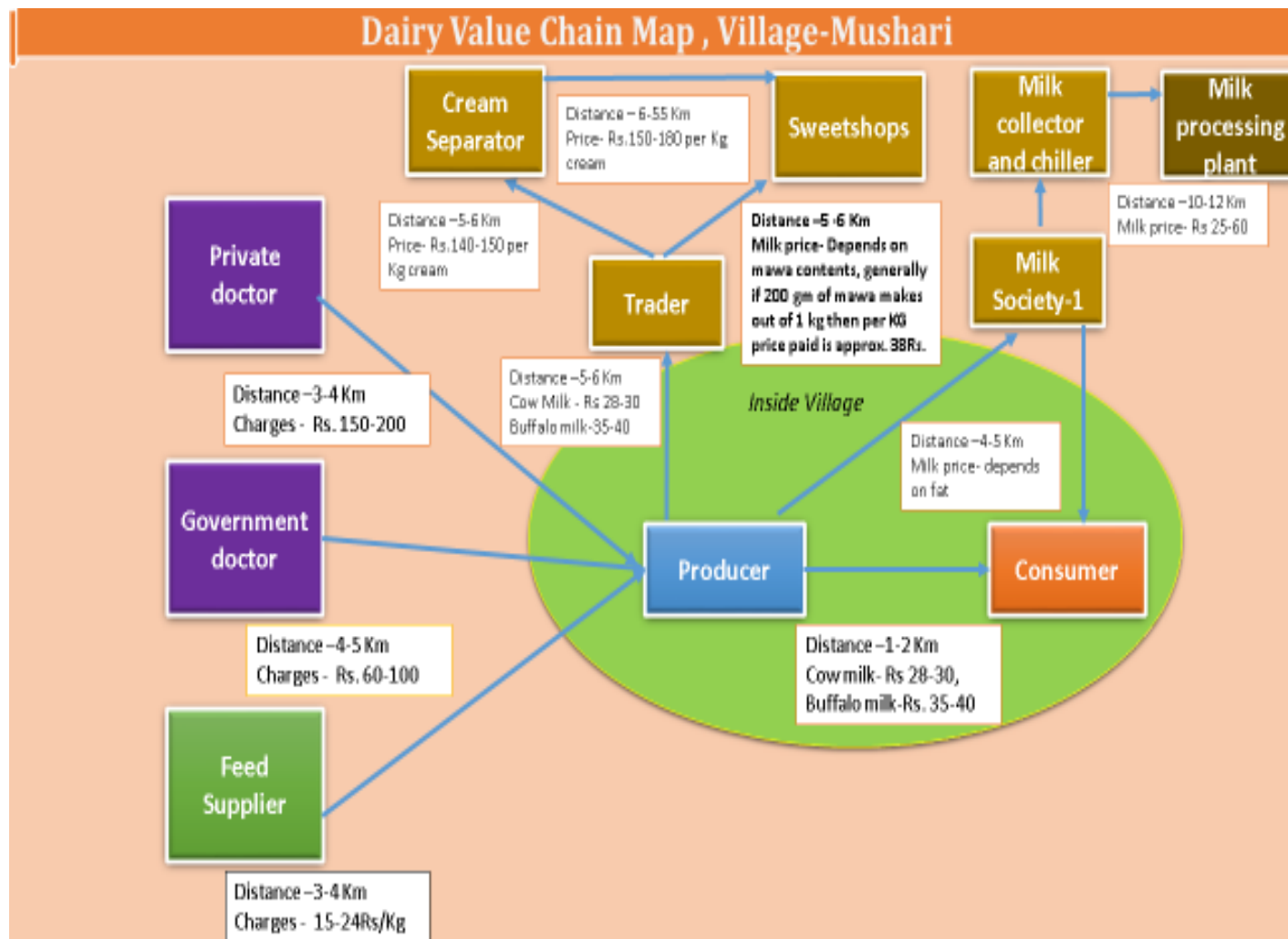


Mushari Village
Female activity
Clock

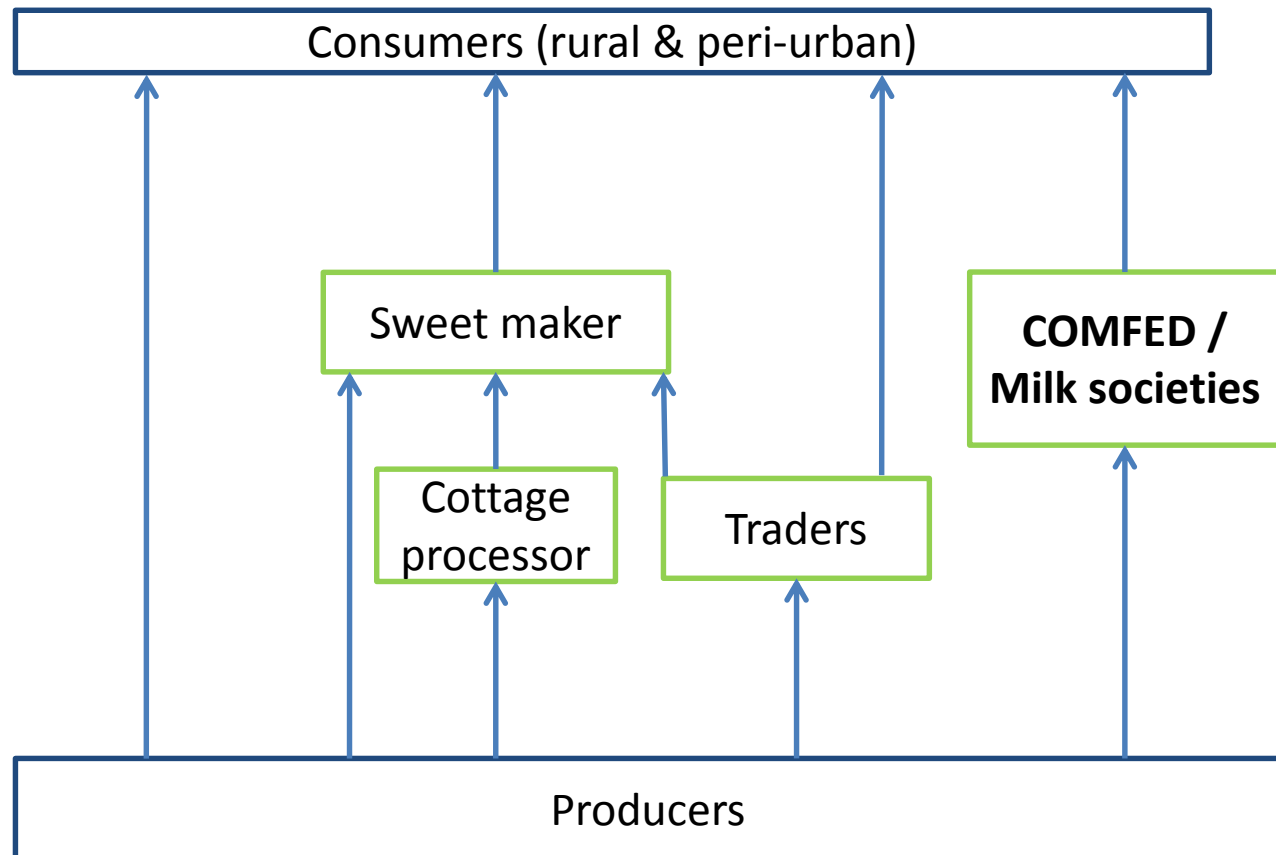


Mapping of value chains

- Several details about the types of value chains and their components in peri-urban and rural scenarios.



Several Value Chains





Results 1: Issues in the value chain

- Unsatisfactory milk price levels
- In-transparent price formation
- Limited trust in quality control (milk fat testing)
- Limited storage & transport facilities (informal trade)
- Contracts, payments not always clearly documented (even society agreements)
- Availability of credit variable
- Limited competition where societies have grown strong

Results 2: Issues in Production

- Animal health:
Access to & quality of services,
increase in mastitis, parasites
- Genetic improvement:
Quality of AI services
- Feed & feeding:
Knowledge limitations for assessing concentrate feeds
From grazing & green fodder -> crop residues
- Knowledge: Access to extension services
- Credit: Not available for purchasing dairy animals
- Gender: Women dominate production,
absent in marketing and as other VC actors

Results 3: Ranked Constraints

Constraints	Votes from Men	Votes from Women	Total Votes
Lack of trained doctors	115	193	308
Lack of market knowledge for inputs & outputs	91	169	260
Limited availability of concentrate feeds	88	164	252
Lack of credit facility	89	143	232
Doctors' fees are high	72	117	189
Cost of feeds is very high	52	89	141
Lack of veterinary facilities	49	82	131
Success rate of insemination is low	49	78	127
Cost of medicines is high	47	79	126
Small number of milk societies	47	78	125
Time requirement for homemade feeds	21	47	68
Black marketing of feeds	17	24	41
Lack of space for keeping ruminants	14	19	33

Conclusions 1

- What the tool has done well:
 - Characterisation of VC actors
 - Covers lots of topics in great detail
 - Allows many voices to be heard
 - Offers gender differentiated views

Conclusions 2

- What the tool has not done so well:
 - Determining variation within villages
(distribution of land, bovines, breeds, income sources ..)
 - Prioritising constraints beyond default reactions
("we need better vets & prices")
 - Providing insights into household nutrition
 - Balancing results between producers, other actors & consumers
 - Offer a pathway for analysis

Conclusions 3

- What have the results provided for further steps?
(e.g. quantitative benchmarking survey, best bet identification)
 - Basis for sampling of various actors
 - Shortlist of issues to be considered (validated)
 - Emphasis on gender differences

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